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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,793	10/21/2003	David J. Monnic	KLR/KAR:8474.0004	5608
152 7590 03/18/2008 CHERNOFF, VILHAUER, MCCLUNG & STENZEL 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204-3157				
EXAMINER KAWSAR, ABDULLAH AL				
ART UNIT		PAPER NUMBER		
2195				
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03/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/690,793

Applicant(s)

MONNIE ET AL.

Examiner

ABDULLAH AL KAWSAR

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/10/2007.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-45 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

1. Claims 1-45 are pending.

Specification

2. The abstract of the disclosure is objected to because it is not descriptive enough to understand the invention. Applicant is reminded of the proper content of an abstract of the disclosure. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: the description of the application is missing summary of the invention.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A

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COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the

applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a

separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

4. Claim 66 is objected to because of the following informalities: Claim 66 should be renumbered as claim 36. Examiner is considering claim 66 as claim 36 and examining the dependent claim 37 dependent on claim 66. Appropriate correction is required.
5. Claim 31 is objected to because of the following informalities: Claim 31 line 12 replace “(c)” with “(d)” at the beginning of the line. Appropriate correction is required.
6. Claims 1, 16 and 31 are objected to for possible 101 rejection because of the following informalities: claimed “system” in claims 1, 16 and 31 are software per se, as they are not incorporated with any hardware or tangible storage medium. Applicant is suggested to amend the claim “A system” with “A computer system” including “processor” or “memory” in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 8-10, 12-13, 16-20, 23-25, 27-28, 31-35, 38-40, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorrentino et al.(Sorrentino) US Patent No. 7080060, in view of Veselov(Veselov) US Patent No. 7131120.

9. Veselov was cited in previous office action.

10. As per claim 1, Sorrentino teaches the invention substantially as claimed including a system for concurrent operation of plural applications, said system comprising:

(a) a shared object space capable of storing at least one shared object and a listener (col 3, lines 1-4);

(b) a shared object stored in said shared object space and accessible to at least two applications so that at least a first application is capable of causing an event in said object, said first application running in a first machine (figure 2; abstract, lines 5-8); and

(c) a listener attached to said shared object and operably associated with a second application running in a second machine, said listener listening for said event (col 3, lines 41-58).

Sorrentino does not specifically disclose first application running in a first virtual machine; and shared object and operably associated with a second application running in a second machine.

However Veselov teaches first application running in a first virtual machine (col 4, lines 39-43); and

shared object and operably associated with a second application running in a second virtual machine (col 4, lines 44-48).

11. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Veselov into the method of Sorrentino to have application with shared object running in first and second virtual machine. The modification would have been obvious because one of the ordinary skills of the art would have application running on virtual machine being able to share resources to have a platform independent application execution with shared resources.

12. As per claim 2, Sorrentino teaches said listener is located in said shared object space (col 3, lines 1-4).

13. As per claim 3, Veselov teaches at least two applications are capable of causing said event (col 4, lines 33-41).

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14. As per claim 4, Sorrentino teaches a second listener located in said shared object space and attached to said shared object (col 7, lines 46-51).
15. As per claim 5, Veselov teaches at least one of said virtual machines is a Java virtual machine (col 4, lines 39-41).
16. As per claim 8, Veselov teaches including a non-object oriented application (col 11, lines 3-5).
17. As per claim 9, Veselov teaches said non-object-oriented application is a C application (col 11, line 6).
18. As per claim 10, Veselov teaches access to said at least one object by said plural applications is synchronized (col 7, lines 53-58).
19. As per claim 12, Veselov teaches at least one object is copy shared among said plural applications (col 7, lines 53-58).
20. As per claim 13, Veselov teaches said at least one object is direct shared among said plural applications (col 6, lines 52-55).

21. As per claim 16, Sorrentino teaches the invention substantially as claimed including a system for concurrent operation of plural applications, said system comprising:

(a) a shared object space capable of storing at least one shared object and a listener (col 3, lines 1-4);

(b) a shared object stored in said shared object space and accessible to at least two applications so that at least a first application is capable of causing an event in said object, said first application running in a first machine (figure 2; abstract, lines 5-8); and

(c) a listener attached to said shared object and operably associated with a second application running in a second machine, said listener listening for said event (col 3, lines 41-58); and

Sorrentino does not specifically disclose first application running in a first virtual machine; shared object and operably associated with a second application running in a second machine; and (d) said listener being able to identify which application caused said event.

However Veselov teaches first application running in a first virtual machine (col 4, lines 39-43);

shared object and operably associated with a second application running in a second machine (col 4, lines 44-48); and

(d) said listener being able to identify which application caused said event (col 5, lines 1-21; col 8, lines 6-17).

22. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Veselov into the method of Sorrentino to have application with shared object running in first and second virtual machine with application identification. The modification would have been obvious because one of the ordinary skills of the art would have application running on virtual machine to have a platform independent application execution with shared resources and having application identification to be able to identify the requesting application. The identification of the application allows the listener in the JMS system to process the request to the specific object or resource request as requested.

23. As per claims 17-20, 23-25 and 27-28, they have similar limitations as of claims 2-5, 8-10 and 12-13 above. Therefore they are rejected under the same rational as of claims 2-5, 8-10 and 12-13 above.

24. As per claim 31, Sorrentino teaches the invention substantially as claimed including a system for concurrent operation of plural applications, said system comprising:

(a) a shared object space capable of storing at least one shared object and a listener (col 3, lines 1-4);

(b) a shared object stored in said shared object space and accessible to at least two applications so that at least a first application is capable of causing an event in said object, said first application running in a first machine (figure 2; abstract, lines 5-8);

(c) a listener attached to said shared object and operably associated with a second application running in a second machine, said listener listening for said event (col 3, lines 41-58); and

Sorrentino does not specifically disclose first application running in a first virtual machine containing a header capable of containing an identifier of the application that caused said event; shared object and operably associated with a second application running in a second machine; and said listener being able to identify which application causes said event from said header.

However Veselov teaches first application running in a first virtual machine containing a header capable of containing an identifier of the application that caused said event (col 4, lines 39-43; col 8, lines 6-17; fig. 7, reference 704);

shared object and operably associated with a second application running in a second machine (col 4, lines 44-48); and

(d) said listener being able to identify which application causes said event from said header (col 5, lines 1-21; col 8, lines 6-17; fig. 7, reference 704).

25. As per claims 32-35, 38-40, 42 and 43, they have similar limitations as of claims 2-5, 8-10 and 12-13 above. Therefore they are rejected under the same rational as of claims 2-5, 8-10 and 12-13 above.

26. Claims 6, 7, 21, 22, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorrentino et al.(Sorrentino) US Patent No. 7080060, in view of Veselov(Veselov) US Patent No. 7131120, and in view of DeMaster(DeMaster) US Patent No. 6066181.

27. As per claim 6, Sorrentino and Veselov do not specifically disclose said shared object space is linked to at least one application by a native method interface enabling said application to utilize a method of native to said application in interacting with said shared object.

However, DeMaster teaches shared object space is linked to at least one application by a native method interface enabling said application to utilize a method of native to said application in interacting with said shared object (fig, 1; col 4, lines 3-18).

28. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of DeMaster into the combined method of Veselov and Sorrentino to link the shared space by native method interface. The modification would have been obvious because one of the ordinary skills of the art would have implemented the native method interface to be able to access the shared object from different application language.

29. As per claim 7, DeMaster teaches system includes a default directory with a native library (fig, 1; col 4, lines 3-18).

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30. As per claims 21 and 22, they have similar limitations as of claims 6 and 7 above.

Therefore they are rejected under the same rational as of claims 6 and 7 above.

31. As per claims 36 and 37, they have similar limitations as of claims 6 and 7 above.

Therefore they are rejected under the same rational as of claims 6 and 7 above.

32. Claims 11, 14, 15, 26, 29, 30, 41, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorrentino et al.(Sorrentino) US Patent No. 7080060, in view of Veselov(Veselov) US Patent No. 7131120, and in view of Barinov et al.(Barinov) US Patent Application Publication No. 2004/0025171.

33. Barinov was cited in previous office action.

34. As per claim 11, Sorrentino and Veselov do not specifically disclose plural applications implement a stock trading system.

35. However Barinov teaches plural applications implement a stock trading system (page 21, par. 0100).

36. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Barinov into the combined method of Veselov and Sorrentino to use the application implementation in stock trading system. The modification

would have been obvious because one of the ordinary skills of the art would have implemented the application in stock trading system for better utilization of shared objects.

37. As per claim 14, Barinov teaches a system manager that analyzes information pertaining to the operation of said shared object space (page 3, par. 0039).

38. As per claim 15, Barinov teaches a global name space in said shared object space (page 5, par. 0061).

39. As per claims 26, 29 and 30, they have similar limitations as of claims 11, 14 and 15 above. Therefore they are rejected under the same rational as of claims 11, 14 and 15 above.

40. As per claims 41, 44 and 45, they have similar limitations as of claims 11, 14 and 15 above. Therefore they are rejected under the same rational as of claims 11, 14 and 15 above.

Response to Arguments

41. Applicant's argument(s) filed 12/10/2007 in respect to the claims have been fully considered but they are moot in view of new ground(s) of rejection.

Conclusion

42. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

43. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH AL KAWSAR whose telephone number is (571)270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

45. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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46. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abdullah Al Kawsar
Patent Examiner
ART Unit 2195

/Meng-Ai An/

Supervisory Patent Examiner, Art Unit 2195